MULTIMEDIA   UNIVERSITY

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2015/2016

DMM5018 – INTRODUCTION TO MULTIMEDIA
(For Diploma Students Only)

29 FEBRUARY 2016
2.30 p.m – 4.30 p.m
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **9 (NINE) pages** (excluding the cover page).

2. There are **2 (TWO) sections** in this question paper.

   Section A: Multiple Choice Question (40 marks)
   Section B: Structured Questions (60 marks)

3. For **Section A**, please mark all your answers in the **OMR sheet** provided.

4. For **Section B**, answer ALL questions. Please write all your answers in the **Answer Booklet** provided.

Section A: Multiple Choice Questions (40 marks)
Instruction: Please mark all your answers in the OMR sheet provided.

1. Which of the following statements **BEST** describes interactive multimedia?
    A. The information is displayed by a computer with a touchscreen or other input device.
    B. The user can sit back and watch it just as they do a movie or the television.
    C. The information is available on the Web, either the internet or a local area network.
    D. The user has some control over what information is viewed and when it is viewed.

2. When you provide a structure of linked elements through which the user can navigate, interactive multimedia becomes _____.
    A. hypermedia   C. passive
    B. distributed   D. hyperactive

3. The following statements are **TRUE** about Virtual Reality **EXCEPT**:
    A. It uses Virtual Reality Modeling Language (VRML) to create virtual worlds networked via the Internet.
    B. It is made up of thousands of geometric objects plotted in two-dimensional space.
    C. It requires terrific computing horsepower to be realistic.
    D. It uses the basic multimedia elements of imagery, sound, and animation.

4. _____ refers to any type of application or presentation that involves more than one type of media, such as text, arts, graphics, video, animation, and sound.
    A. An executable file   C. Multimedia
    B. Desktop Publishing   D. Hypertext

5. Which of the following statement is **TRUE** about Local Area Network?
    A. It covers very large networks that cover an entire city.
    B. It covers a broad area, like communication links that cross metropolitan, regional or national boundaries.
    C. It is used for communications among various devices, such as telephones, fax machines and printers.
    D. It covers a small physical area, like a home or a small group of buildings.

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6.   Figure 1.0 below shows the interface for one of the multimedia software.

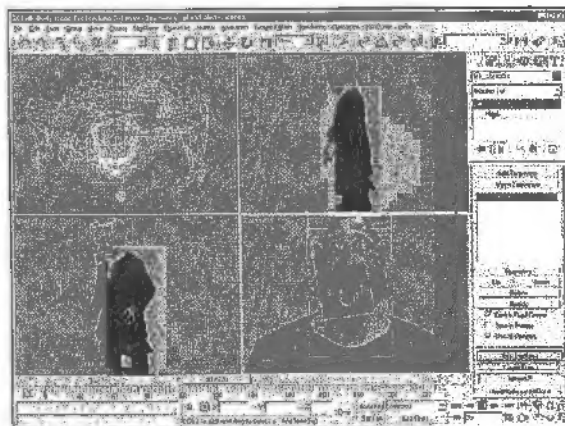

Figure 1.0: Interface for one of the multimedia software

Which of the following is **NOT** the feature of the software in Figure 1.0?
A.   Lathe and extrude
B.   Color and texture mapping
C.   Programming and scripting
D.   Multiple dimension windows

7.   Figure 2.0 shows an image used one of the technique to minimize jaggies or blocky patterns.
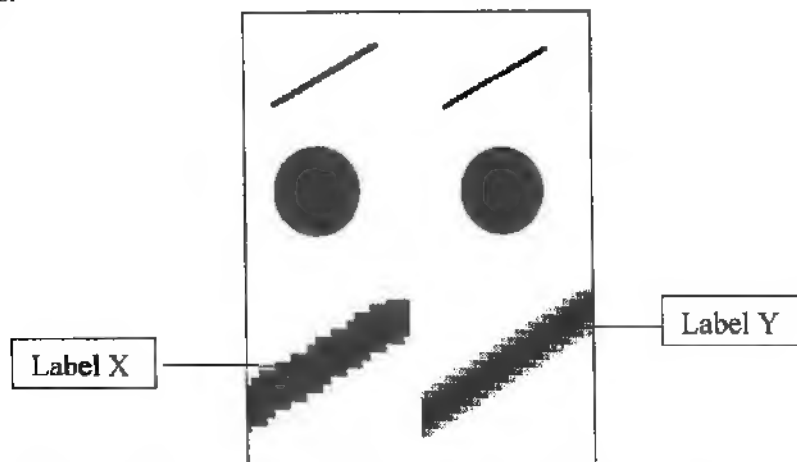

Figure 2.0: An image used one of the technique to minimize jaggies

Label X and label Y are **BEST** replaced with:

A.   Aliasing, Anti-aliasing
B.   Anti-aliasing, Aliasing
C.   Rendering, Casting
D.   Aliasing, Not Anti-Aliased

8. There are three types of authoring tools which are:
    i.   Card and page based authoring tools
    ii.   Icon and object based authoring tools
    iii.   Card and object based authoring tools
    iv.   Time-based authoring tools

    A.   i and ii   C.   i, ii and iv
    B.   i, ii and iii   D.   ii, iii and iv

9. Which of the following team members will ensure that the project is visually pleasing and friendly?
    A.   Multimedia Designer   C.   Multimedia Programmer
    B.   Video Specialist   D.   Writer

10. Which of the following statements below are **TRUE** about the guidelines of choosing font?
    i.   Consider legibility and readability
    ii.   Use drop caps and initial caps for accent.
    iii.   Surround headlines with white space
    iv.   Use of many fonts to grab reader's attention

    A.   i and ii   C.   i, ii and iv
    B.   i, ii, and iii   D.   ii, iii and iv

11. Which of the following examples below are categorized as san serif font type?
    i.   **Impact**
    ii.   Verdana
    iii.   Times New Roman
    iv.   Courier New

    A.   i and ii   C.   ii and iii
    B.   i and iii   D.   iii and iv

12. Which of the following statement is **TRUE** about serif fonts?
    A.   Serif font has little decoration at the end of a letter stroke.
    B.   Serif font do not have decoration at the end of a letter stroke.
    C.   Serif font has a stroke that rise above the x-height below the baseline.
    D.   Serif font is a font that has an uppercase letter in the middle of a word.

13. The space between lines of text is called _____.
    A.   aliasing   C.   leading
    B.   kerning   D.   warping

14. The following statements are **TRUE** about how vector-drawn images work **EXCEPT**:
    A.   A vector is a data matrix describing the individual dots of an image.
    B.   Cartesian coordinates are numbers that describe a point in two- or three dimensional space as the intersection of the X, Y, and Z axes.
    C.   A vector is a line that is described by the location of its two endpoints.
    D.   Vector drawing makes use of Cartesian coordinates.

15. Image C in Figure 3.0 below is referring to _____ process in 3D modeling software.

Figure 3.0: Image C

    A.   lathing   C.   modeling
    B.   Extruding   D.   shaping

16. The following statements are **TRUE** about PICT image file format **EXCEPT**:
    A.   PICT is a complicated and versatile format developed by Apple.
    B.   PICT is the most commonly image file format used in Macintosh.
    C.   In a PICT file, both vector-drawn objects and bitmaps can reside side by side.
    D.   Each image application on the Macintosh cannot import or export PICT files.

17. Graphic artists use vector-drawn objects when designing printed media because:
    A.   they can be viewed directly in web browsers.
    B.   they can be scaled to print at any size.
    C.   they can be converted across platforms more easily.
    D.   they can contain more subtle variations in shading than bitmap graphics.

18. When using sound elements in your multimedia project, which of the following statements is **NOT** true?
    A.   Always provide a toggle switch to disable the sound.
    B.   Choose music that fits the atmosphere you wish to create.
    C.   Use as many special effects as you can.
    D.   Always test a project with potential users.

19. The software that allows the creation of multiple font designs from two existing typefaces is known as _____ .
    A.   Opentype   C.   Blender
    B.   Fontographer   D.   Maya

20. Which of the following statements describes a successful graphic approach?
    A.   Applying a variety of decorative pattern borders
    B.   Employing at least five different fonts
    C.   Creating background images with lots of color
    D.   Using simple screens with lots of white space

21. Mapping the structure of a project should be done early in the _____ phase.
    A.   planning   C.   testing
    B.   implementation   D.   closing

22. The following file formats are specifically designed to contain animations **EXCEPT**:
    A.   .max   C.   .fla
    B.   .gif   D.   .psd

23. _____ animation is a technique in which a series of progressively different graphics is used on each frame of movie film.
    A.   Phi   C.   Beta
    B.   Cel   D.   Path

24. What is the process of creating a series of frames between keyframes in animation software?
    A.   Tracking   C.   Tweening
    B.   Authoring   D.   Kinematics

25. The file format that uses a shorthand representation of musical notes and durations stored in numeric form is:
    A.   AIFF   C.   MIDI
    B.   MPS   D.   Quick Time

26. What is the main difference between 2-D and 3-D animation?
    A.   The number of tweens.
    B.   The number of keyframes.
    C.   The number of frames per second.
    D.   The number of axes on which the motion occurs.

Continued.......

27. The file size of a three-second recoding sampled at 22 kHz, 16-bit stereo would be about:
    A. 1,056 bytes   C. 264,000 bytes
    B. 2,112 bytes   D. 1,056,000 bytes

28. The process of reducing the number of sample slices you take in a second is called:
    A. downsampling   C. quantization
    B. buffering   D. equalization

29. Audio recorded at 44.1 kHz, 16-bit stereo is considered:
    A. phone-quality   C. AM quality
    B. voice-quality   D. CD quality

30. Which of the following sound file characteristics does **NOT** directly affect the size of a digital audio file?
    A. Sample rate   C. Tracks (stereo vs.mono)
    B. Sound resolution   D. Volume

31. _____extension is used when the file streams audio and video together.
    A. ACC   C. WAV
    B. MP4   D. AVI

32. The following examples are nonlinear editing (NLE) software **EXCEPT**:
    A. Adobe Premiere   C. Avid's Media Composer
    B. Apple's Final Cut   D. Apple's iMovie

33. Which of the following examples is **NOT** an analog video transfer method?
    A. MPEG   C. Component
    B. Composite   D. S-Video

34. Which of the following multimedia element places the highest performance demand on the computer?
    A. animation   C. video
    B. image   D. sound

35. When you type a URL into a web browser, your computer connects to a(n) _____ to obtain the requested web page.
    A. client   C. database
    B. server   D. domain

36. Figure 4.0 below shows one of the analog video signal.
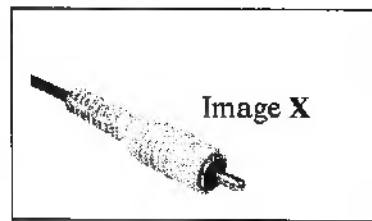
Figure 4.0: One of analog video signal

Image **X** is referring to _____ video.

A. separate   C. component
B. composite   D. super

37. Which of the following is **FALSE** about animation on the web?
A. Adobe Flash provides animation on the web.
B. The Flash plug-in for browsers offers animation and interaction.
C. Make simple animations of small images with GIF89a.
D. Play animation using the <audio> tag.

38. When a stream of data is sent over the Internet by your computer, it is first broken down into _____ by the Transmission Control Protocol (TCP).
A. information   C. packet
B. message   D. daemon

39. Which of the following is **NOT** an option for a multimedia developer to do in order to work within the constraints of bandwidth bottlenecks?
A. Compress data into ZIP file before transmitting.
B. Design alternate low-bandwidth and high-bandwidth navigation paths to accommodate all users.
C. Allow users to download data repeatedly.
D. Implement streaming methods that allow data to be transferred and displayed incrementally as it comes in.

40. _____ is a software application that run on a user's personal computer to provide the interface for downloading and viewing web pages and multimedia on the World Wide Web.
A. Interface   C. Paging
B. Browser   D. HTML

Section B: Structured Questions (60 marks)
Instruction: Please write all your answers in the Answer Booklet provided.

Question 1 (15 Marks)

    a) List **FIVE** benefits of incorporating multimedia in a software.   (5 marks)

    b) Discuss **THREE** features of authoring tools.   (6 marks)

    c) State **FOUR** intangible elements needed in developing a multimedia project.

                                                                       (4 marks)

Question 2 (15 Marks)

    a) Define navigation map.   (2 marks)

    b) Discuss **FOUR** types of organizing structures as listed below:
          i.   Linear   (2 marks)
          ii.   Hierarchical   (2 marks)
          iii.   Non-linear   (2 marks)
          iv.   Composite   (2 marks)

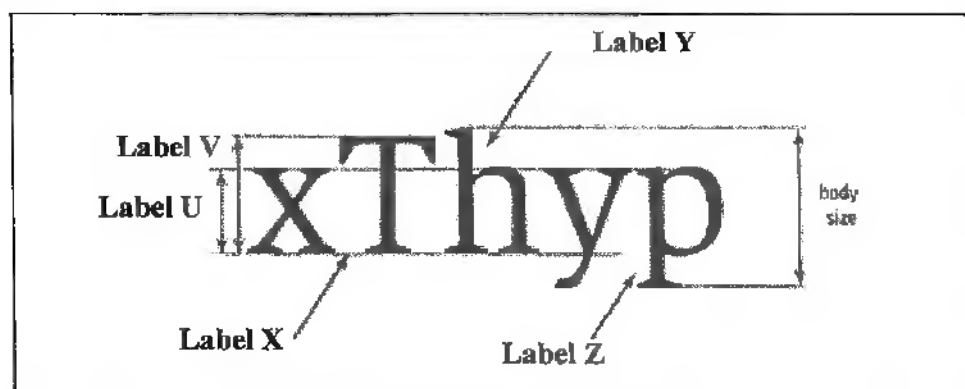   c) Figure 1.0 shows the illustration of measurement type.   (5 marks)

Figure 1.0: Illustration of measurement type

Gives the name for **Label U, V, X, Y** and **Z** below.

        i.   Label V : _____
        ii.   Label U : _____
        iii.   Label X : _____
        iv.   Label Y : _____
        v.   Label Z : _____

Question 3 (15 Marks)

a) Define the following terms:
    i.   Keyframes   (2 marks)
    ii.   Kinematics   (2 marks)
    iii. Inverse kinematics   (2 marks)

b) Name and describe **THREE** basic sound editing operations that most multimedia producers use. (6 marks)

c) State **THREE** sampling frequencies that are most frequently used for CD quality.
(3 marks)

Question 4 (15 Marks)

a) Define analog video. (1 mark)

b) Explain **THREE** analog video broadcast standards commonly used around the world.
(6 marks)

c) Explain **FOUR** tips for creating titles to be used in video. (8 marks)

End of Page.